UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,294	05/19/2004	Frederic Plante	IBM-021	5608

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ART UNIT	PAPER NUMBER
2192	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/849,294	PLANTE, FREDERIC
	Examiner	Art Unit	
	Zheng Wei	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _16 November 2007_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-4,7,8,15 and 16_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-4,7,8,15 and 16_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _19 May 2004_ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _11/16/2007_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Remarks

1.   This office action is in response to the amendment filed on 11/16/2007.

2.   Claims 3 and 4 have been amended.

3.   The claim rejection to claims 3 and 4 is withdrawn in view of Applicant's

amendment

4.   Claims 1-4, 7, 8, 15 and 16 remain pending and have been examined.

Information Disclosure Statement

5.   The information disclosure statements filed on 11/16/2007 has been placed in

the application file and the information referred to therein has already been

considered.

Response to Arguments

6.   Applicant's arguments filed on 11/16/2007, in particular on pages 6-8, have been

fully considered but they are not persuasive. For example:

   ▪ At page 7, third paragraph, the Applicant submits that Coad discloses a

      reverse engineering process, but there is no description of a forward

      engineering process. However, the Examiner respectfully disagrees. As Coad

      disclosed at Fig.1, item 106 is a Reverse Engineering Module which converts

      item 104 (Source Code) to items 108/102 (Repository/UML) and item 110

(Code Generator) is a forward engineering module to source code from 108

(Repository).

- At page 7, third paragraph, the Applicant points out that Coad does not

  address the problem about how to synchronize interdependent artifacts that

  have been separately modified. However, Coad clearly discloses to

  synchronize (re-generates/updates) the interdependent artifacts (source

  code/repository) (see for example, col.2, lines 15-22, about re-generating the

  source code to include latest modification of UML and the reverse engineering

  module updating the repository to include any modification in the source code).

  Therefore, Coad does disclose such limitation as cited in the claim 1.

- At page 7 third paragraph to page 8, second paragraph, the Applicant argues

  that Coad does not disclose the artifacts that can be interdependent and

  concurrently modified. However, the Examiner respectfully disagrees. As Coad

  disclosed at Fig.1, artifacts (source code/repository/UML) can be modified

  concurrently and further conducts reverse/forward engineering

  processing.(see for example, col.2, lines 15-22 and related descriptions)

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8.   Claims 1-4, 7-8 and 15-16 are rejected under 35 U.S.C. 102(b) as being

anticipated by Coad (Coad et al., US 6,851,107 B1)

Claim 1:

Coad discloses a method/system for synchronizing a first artifact and a second

artifact, the first and second artifacts being interdependent and concurrently

modified, the first and second artifacts each having a plurality of elements and

being of different formats, the method comprising:

- Performing a reverse engineering operation to generate a temporary artifact

    having all the elements of a last synchronized version of the first artifact and

    having all the elements of a latest version of the second artifact transformed

    as the first artifacts (see for example, Fig.1, step 102 "UML"-step 108 ->step

    108 "Repository"->step 110 "Code Generator->step 104 "Source Code" and

    related text; also see Fig.2, step 202 "Source Code" ->step 200 "Transient

    Meta Model" -> step 208 "Incremental Code Editor" -> step 203 "Source

    Code" and related text)

- merging the temporary artifact and a latest version of the first artifact to create

    a synchronized version of the first artifact (see for example, Fig.2, steps 205,

    205 -> step 208 "Incremental Code Editor" -> step 203 "Source Code" and

    related text); and

- performing a forward engineering operation to generate a synchronized

  version of the second artifact having all the elements of the latest version of

  the second artifact and having all the elements of the synchronized version of

  the first artifact transformed as the second artifact (see for example, Fig.1,

  step 104 "source code" -> step 106 "Reverse Engineering Module" ->step 108

  "Repository"->step 102 "UML"-step 108 ->step 110 "Code Generator->step

  104 "Source Code" and related text; also see Fig.2, step 202 "Source Code" -

  >step 200 "Transient Meta Model" -> step 208 "Incremental Code Editor" ->

  step 203 "Source Code" and related text)

Claim 2:

Coad also discloses the method/system of claim 1 wherein one of the first and

second artifacts is a software model artifact and the other of the first and second

artifacts is a code artifact (see for example, Fig.1, step 104 "Source Code", step

102 "UML"; also see Fig.2, step 202 "Source Code", step 200 "Transient Meta

Model" and related text)

Claim 3:

Coad further discloses the method of claim 2, wherein the software model artifact

is a UML file (see for example, Fig.1, step 102 "UML" and related text; also see

col.15, lines 54-55, "Further, although the present invention is described and

shown using the various views of the UML...")

Claim 4:

<u>Coad</u> also discloses the method of claim 2, wherein the code artifact is a 3GL

source file. (see for example, Fig.13, the example screenshot including UML

model and 3GL source code (Java source code))

Claims 7-8:

Claims 7-8 are computer program products version of the claimed method,

wherein all claimed limitation functions have been addressed in claims 1 and 2

above respectively. (see for example, col.3, lines 3-23, "computer-readable

medium" and related text). Therefore, they also would have been anticipated by

<u>Coad</u>.

Claims 15-16:

Claims 15-16 are system version for performing the claimed method as in claims

1 and 2 addressed above, wherein all claimed limitation functions have been

addressed and/or set forth above (see for example, Fig.6, data processing

system suitable for practicing the present invention and related text). Thus, they

also would have been anticipated by <u>Coad</u>.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10.   Applicant's arguments with respect to claims rejection have been considered but are not persuasive. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-2059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZW

TUAN DAM
SUPERVISORY PATENT EXAMINER